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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,837	04/10/2007	Heike Barlag	32860-001100/US	9815
30596 7590 04/26/2011 HARNESS, DICKEY & PIERCE, P.L.C. P.O.BOX 8910 RESTON, VA 20195				
EXAMINER DIETERLE, JENNIFER M				
ART UNIT		PAPER NUMBER		
1759				
NOTIFICATION DATE		DELIVERY MODE		
04/26/2011		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

demailroom@hdp.com  
siemensgroup@hdp.com  
pshaddin@hdp.com

**Advisory Action  
Before the Filing of an Appeal Brief**

**Application No.**

10/587,837

**Applicant(s)**

BARLAG ET AL.

**Examiner**

Jennifer Dieterle

**Art Unit**

1759

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 14 April 2011 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(g).

**AMENDMENTS**

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_  
Claim(s) objected to: \_\_\_\_\_  
Claim(s) rejected: 1-10 and 21-28  
Claim(s) withdrawn from consideration: 11-20

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

/Jeffrey T. Barton/  
Supervisory Patent Examiner, Art Unit 1759

Continuation of 3. NOTE: Applicants have amended claims 1 and 26 to comprise measuring an oxidation current and measuring a reduction current which will require further search and consideration.

Continuation of 11, does NOT place the application in condition for allowance because: Applicant traverses the rejection of claims 1-10, 21-25 and 28 under 35 U.S.C. 112 first paragraph. Applicant remarks that figure 3 shows that the measuring phase amounts to 0.25 seconds and the relaxation phase amounts to 0.75 seconds and that figure 4 shows the advantageous effect of pulsed redox-cycling. While the examiner does not contend that pulsed redox-cycling is a known measuring technique, the examiner directs applicant's attention to their claim, which is directed to a method of selecting pulse lengths. While figure 3 would be useful if applicant's were claiming a method of selecting appropriate voltage amounts, it does not lead one skilled in the art to the criteria necessary in order to select appropriate pulse lengths. Additionally, while applicant has specified that the pulse lengths equal 0.25 and 0.75 seconds, this also does not provide one skilled in the art with an understanding as to the criteria or steps involved with selecting appropriate pulse lengths, it merely sets forth a given value. With regard to applicant's remarks directed to figures 5 and 6, while it is noted that these figures disclose experiments utilizing relaxation pulse lengths ranging from 0.255 to 4.755 seconds at various voltages to show improvement in signal constancy there is no criteria set forth as to enable one skilled in the art to select a relaxation pulse length so that the change in concentration of the mediator brought about by the consumption of the mediator is reversible. Therefore, the rejection of claims 1-10, 21-25 and 28 under 35 U.S.C. 112 first paragraph is maintained.

Additionally, applicant remarks that Gunasingham does not disclose that the capacitive current is small in comparison with a Faraday current. This is not persuasive as Gunasingham teach on page 353 that peak current is a function of both Faradaic and capacitive discharge current and notes that when the faradaic current is significant, the reaction has reached a steady state and on page 351, Gunasingham shows in figure 1 that the measuring phase measurement is taken at the end of the measuring phase which would be when the capacitive current is small in comparison with a Faraday current.

Additionally, applicant remarks that Gunasingham does not disclose that the change in the concentration of the mediator brought about by the consumption of the mediator is reversible. Figure 1 in Gunasingham shows multiple measurement phases which shows that it is reversible.